

Radial slit maps of bounded multiply connected regions

Abstract :

In this paper we present a boundary integral equation method for the numerical conformal mapping of a bounded multiply connected region onto a radial slit region. The method is based on some uniquely solvable boundary integral equations with adjoint classical, adjoint generalized and modified Neumann kernels. These boundary integral equations are constructed from a boundary relationship satisfied by a function analytic on a multiply connected region. Some numerical examples are presented to illustrate the efficiency of the presented method.